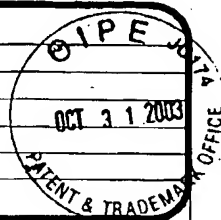


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FOREIGN PATENT DOCUMENTS									
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)					
CA	A43	DE	3508251			09/11/1986			
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CA	A45	DE	4015255			11/14/1991			
CA	A46	EP	12401			06/25/1980			
CA	A47	EP	48159			03/24/1982			
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CA	A50	EP	88350			09/14/1983			
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CA	A89	WO	88/09789			12/15/1988			
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CA	A91	WO	91/13088			09/05/1991			
CA	A92	WO	92/03472			03/05/1992			
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CA	A95	ASKIN, et al., "Efficient Degradation of FK-506 to a versatile synthetic intermediate," <u>J. Org. Chem.</u> , 1990, Vol. 55(20), pgs. 55451-4.			
CA	A96	GOULET, et al., "Degradative studies on the tricarbonyl containing macrolide rapamycin," <u>Tetrahedron Lett.</u> , 1990, Vol. 31(34), pgs. 4845-8.			
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CA	A98	JONES, et al., "A formal synthesis of FK-506. Exploration of some alternatives to macrolactamization," <u>J. Org. Chem.</u> , 1990, Vol. 55(9), pgs. 2786-97.			
CA	A99	RAO, et al., "Studies directed towards the synthesis of immunosuppressive agent FK-506: construction of the tricarbonyl moiety," <u>Tetrahedron Lett.</u> , 1990, Vol. 31(10), Pgs. 1439-42.			
CA	A100	HARDING, et al., "A receptor for the immunosuppressive FK506 is a <i>cis-trans</i> peptidyl-prolyl isomerase," <u>Nature Lett.</u> , 1989, Vol. 341, pgs. 758-60.			
CA	A101	FINBERG, et al., "Prevention of HIV-1 Infection and Preservation of CD4 Function by the Binding of CPFs to gp120," <u>Science</u> , 1990, Vol. 249, pgs. 287-91.			
CA	A102	GOODFELLOW, et al., "p-Nitrophenyl 3-diazopyruvate and diazopyruvamide, a New Family of Photoactivatable Cross-Linking Bioprobes," <u>Biochemistry</u> , Vol. 28(15), pgs. 6346-60.			
CA	A103	WASSERMAN, et al., "Synthesis of the tricarbonyl region of FK-506 through an amidophosphorane [Erratum to document cited in CA111(7):57366p]," <u>J. Org. Chem.</u> , 1989, Vol. 54(22), pg. 5406.			

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Date Submitted:		First Named Inventor	Gregory S. Hamilton et al. OCT 31 2003
		Group Art Unit	1625
(use as many sheets as necessary)		Examiner Name	Unassigned
		Attorney Docket Number	054707-1231
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CA	A104	WASSERMAN, et al., "Synthesis of the tricarbonyl region of FK-506 through an amidosphere," <u>J. Org. Chem.</u> , 1989, Vol. 54(12), pgs. 2785-6.	
CA	A105	DRAGOVICH, et al., "Structured-Based Design of Novel, Urea-Containing FKBP12 Inhibitors," <u>J. Med. Chem.</u> , 1996, Vol. 39, pgs. 1872-1884.	
CA	A106	GOLD, et al., "The Immunosuppressant FK506 Increases the Rate of Axonal Regeneration in Rat Sciatic Nerve," <u>The Journal of Neuroscience</u> , 1995, Vol. 15(11), pgs. 7509-7516.	
CA	A107	GOLD, et al., "The Immunosuppressant FK506 increases functional recovery and nerve regeneration following peripheral nerve injury," <u>Restorative Neurology and Neuroscience</u> , 1994, Vol. 6, pgs. 287-296.	
CA	A108	LYONS, et al., "Immunosuppressant FK506 promotes neurite outgrowth in culture of PC12 cells and sensory ganglia," <u>Proc. Natl. Acad. Sci. USA</u> , 1994, Vol. 91, pgs. 3191-3195.	
CA	A109	GOLD, et al., "Multiple signals underlie the anatomy-induced up-regulation of c-JUN in adult sensory neurons," <u>Neuroscience Letters</u> 176, 1994, pgs. 123-127.	
CA	A110	GOLD, et al., "Regulation of the transcription factor c-JUN by nerve growth factor in adult sensory neurons," <u>Neuroscience Letters</u> 154, 1993, pgs. 129-133.	
CA	A111	ASKIN, et al., "Chemistry of FK-506: benzilic acid rearrangement of the tricarbonyl system," <u>Tetrahedron Lett.</u> , 1989, Vol. 30(6), pgs. 671-4.	
CA	A112	COLEMAN, et al., "Degradation and manipulations of the immunosuppressant FK506: preparation of potential synthetic intermediates," <u>Heterocycles</u> , 1989, Vol. 28(1), pgs. 157-61.	
CA	A113	FAELTH, et al., "Interactions between C=S groups in 1, 2 and 1, 3-bis (thiocarbonyl) Compounds: A Study by Spectroscopy, X-Ray Crystallography, and CNDO/S Calculations," <u>THEOCHEM</u> , 1989, Vol. 55, pgs. 239-59.	
CA	A114	DOULMEDAIS, et al., "Stereochemistry of Electrochemical Reduction of Optically Active $\alpha$ -ketoamides. II. Electroreduction of benzoylformamides derived from S-(-)-proline," <u>Bull. Soc. Chim. Fr.</u> , 1989, Vol. (2), pgs. 185-01. (French)	
CA	A115	SOAI, et al., "Asymmetric Allylation of $\alpha$ -keto amides Derived from (S)-proline esters," <u>Pept. Chem.</u> , 1986, Vol. 24, pgs. 327-30.	
CA	A116	MUNEGUMI, et al., "Asymmetric Catalytic Hydrogenations of N-pyruvoyl-(s)-proline esters," <u>Bull. Chem. Soc. Jpn.</u> , 1987, Vol. 60(1), pgs. 243-53.	
CA	A117	SOAI, et al., "Diastereoselective asymmetric allylation of chiral $\alpha$ -keto amides with allyltrimethylsilane. Preparation of protected homoallylic alcohols," <u>J. Chem. Soc.</u> , 1984, Vol. 15, pgs. 1016-17.	
CA	A118	SOAI, et al., "Sodium borohydride as diastereoselective reducing agent of chiral $\alpha$ -keto amides," <u>Pept. Chem.</u> , 1982, Vol. 20, pgs. 81-4.	

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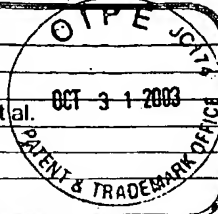
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CA	A119	SOAI, et al., "Asymmetric Synthesis of Functionalized tertiary alcohols by diastereoselective allylation of chiral $\alpha$ -keto amides derived from (S)-proline esters: control of stereochemistry based on saturated coordination of Lewis acid," <u>J. Org. Chem.</u> , 1986, Vol. 57(17), pgs. 3290-5. (English)	
CA	A120	SOAI, et al., "Asymmetric synthesis of both enantiomers of $\alpha$ -hydroxy acids by the diastereoselective reduction of chiral $\alpha$ -keto amides with complex metal hydrides in the presence of a metal salt," <u>Chem. Lett.</u> , 1986, Vol. 11, pgs. 1897-900.	
CA	A121	SOAI, et al., "Diastereoselective reduction of chiral $\alpha$ -keto amides derived from (S)-proline esters with sodium borohydride. Preparation of optically active $\alpha$ -hydroxy acids," <u>J. Chem. Soc.</u> , 1985, Vol. 1(14), pgs. 769-72.	
CA	A122	BENDER, et al., "Periodate oxidation of $\alpha$ -keto $\gamma$ -lactams. Enol oxidation and $\beta$ -lactam formation. Mechanism of periodate hydroxylation reactions," <u>J. Org. Chem.</u> , 1978, Vol. 43(17), pgs. 3354-62.	
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CA	A124	SOAI, et al., "Unusual effect of mixed solvent on the asymmetric reduction of chiral $\alpha$ -keto amides with sodium borohydride," <u>J. Chem. Soc.</u> , 1982, Vol. 21, pgs. 1282-3.	
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CA	A126	CUSHMAN, et al., "Design of potent competitive inhibitors of angiotensin-converting enzyme. Caboxylalkanoyl and mercaptoalkanoyl amino acids," <u>Biochemistry</u> , 1977, Vol. 16(25), pgs. 5484-91.	
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CA	A128	BYCROFT, et al., "Efficient asymmetric synthesis of $\alpha$ -amino from $\alpha$ -keto acids and ammonia with conservation of the chiral reagent," <u>J. Chem. Soc.</u> , 1975, Vol. 24, pgs. 988-9.	
CA	A129	CHAKRABORTY, "Studies towards the development of cyclic peptide-based analogs of macrolide immunosuppressants," <u>Pure Appl. Chem.</u> , 1996, Vol. 68(3), pgs. 565-568.	
CA	A130	PONTICELLI, "Treatment of the Nephrotic Syndrome with Cyclosporin A," <u>J. of Autoimmunity</u> , 1992, Vol. 5, pgs. 315-24.	
CA	A131	TINDALL, "Immunointervention with Cyclosporin A in autoimmune Neurological Disorders," <u>J. of Autoimmunity</u> , 1992, Vol. 5, pgs. 301-313.	
CA	A132	TUGWELL, "Cyclosporin in the Treatment of Rheumatoid Arthritis," <u>J. of Autoimmunity</u> , 1992, Vol. 5, pgs. 231-40.	

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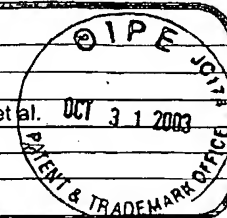
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CA	A133	FRY, "Psoriasis: Immunopathology and Long-term Treatment with Cyclosporin," <u>J. of Autoimmunity</u> , 1992, Vol. 5, pgs. 277-83.	
CA	A134	FEUTRAN, "The Optimal use of Cyclosporin o in Autoimmune Disease," <u>J. of Autoimmunity</u> , 1992, Vol. 5, pgs. 183-95.	
CA	A135	SLEE, et al., "Selectivity in the Inhibition of HIV and FIV Protease: Inhibitory and Mechanistic Studies of Pyrrolidine-Containing $\alpha$ -Keto Amide and Hydroxyethylamine Core Structures," <u>J. Am. Chem. Soc.</u> , 1995, Vol. 117(48), pgs. 1187-78.	
CA	A136	NICOLAU, et al., "Total synthesis of rapamycin," <u>Che. -Eur. J.</u> , 1995, Vol. 1(5), pgs. 318-33.	
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CA	A138	HAUSKE, et al., "Investigation of the effects of synthetic non-cytotoxic immunophilin inhibitors on MDR," <u>Bioorg. Med. Chem. Lett.</u> , 1994, 4(17), 2097-102.	
CA	A139	MASHKOVSKII, et al., "1-[4-(2-Hydroxy-3-tert-butylaminopropoxy)-indole-3-yl (5-acetamido-1-(S)-carboxypentyl) -DL-alanyl] -L-proline dihydrochloride, a new angiotensin-converting enzyme inhibitor with $\beta$ -adrenoblocking properties," <u>Khim. -Farm. Zh.</u> , 1993, Vol. 27(10), pgs. 16-20.	
CA	A140	Ranganathan, Darshan et al., "Protein Backbone Modification by Novel C $\alpha$ -C Side-Chain Scission," 1994, <u>J. Am. Chem. Soc.</u> , Vol. 116(15), pgs. 6545-57.	
CA	A141	Baader, Ekkehard et al., "Inhibition of prolyl 4-hydroxylase by oxalyl amino acid derivatives in vitro, in isolated microsomes and in embryonic chicken tissues," <u>Biochem. J.</u> , 1994, Vol. 300(2), pgs. 525-30.	
CA	A142	Holt, Dennis A. et al., "Structure-activity of synthetic FKBP ligands as peptidyl-prolyl isomerase inhibitors," <u>Bioorg. Med. Chem. Lett.</u> , 1994, Vol. 4(2), pgs. 315-20.	
CA	A143	Karle, Isabella L. et al., "Conformation of the oxalamide group in retro-bispeptides. Three crystal structures." <u>Int. J. Pept. Protein Res.</u> , 1994, Vol. 43(2), pgs. 160-5.	
CA	A144	Kaczmar, et al., "Darstellung verscheider Schlangenkafig-Polyelektrolyte auf der Basis von Polyacrylamiden und einem Anionenaustauscher," <u>Makromol. Chem.</u> , 1976, Vol. 177, pgs. 1981-9. (German)	
CA	A145	Steiner, Joseph P. et al., "High braindensities of the immunophilin FKBP colocalized with calcineurin," <u>Nature Lett.</u> , 1992, Vol. 358, pgs. 584-7.	
CA	A146	Pattenden, Gerald and Tnkard, Mark, "Facile Synthesis of the tricarbonyl subunit in the immunosuppresant rapamycin," <u>Tetrahedron Lett.</u> , 1993, Vol. 34(16), pgs. 2677-80.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/615,803
		Filing Date	07/10/2003
Date Submitted: (use as many sheets as necessary)		First Name and Inventor	Gregory S. Hamilton et al.
		Group Art Unit	1625
Sheet 7 of 12		Examiner Name	Unassigned
		Attorney Docket Number	054707-1231

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CA	A147	Furber, M. et al., "Studies relating to the immunosuppressive activity of FK506," Tetrahedron Lett., 1993, Vol. 34(8), pgs. 1351-4.	
CA	A148	Ranganathan, Darshan et al., "Oxalo peptides as core motifs for protein design," J. Chem. Soc., 1993, Vol. (1), pgs. 92-4.	
CA	A149	Dawson, Ted M. et al. "Immunosuppressant FK506 enhances phosphorylation of nitric oxide synthase and protects against glutamate neurotoxicity," Proc. Natl. Acad. Sci. USA, 1993, Vol. 90, pgs. 9808-12.	
CA	A150	Cunliffe, C. Jane et al., "Novel inhibitors of propyl 4-hydroxylase. 3. Inhibition by the substrate analog N-oxaloglycine and its derivatives," J. Med. Chem., 1992, Vol. 35(14), pgs. 2652-8.	
CA	A151	Waldmann, Herbert, "Amino acid esters as chiral auxiliaries in Barbier-type reactions in aqueous solutions," Liebigs Ann. Chem., 1991, Vol. (12), pgs. 1317-22. (German)	
CA	A152	Krit, N.A. et al., "Impact of the nature of alkyl radical on the biological activity of N-carboxyalkyl dipeptides," Khim.-Farm. Zh., 1991, Vol. 25(7), pgs. 44-6. (Russian)	
CA	A153	Blaschke et al., Chemical Abstracts, 1974, Vol. 84, pg. 78405k.	
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CA	A155	Effenberger F. et al., "Diastereoselective addition of benzenesulfonyl chloride to 1-acryloylproline esters," Chemical Abstracts, 1989, Vol. 10, pgs. 778-9.	
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CA	A160	Stocks, M. et al., "macrocyclic ring closures employing the intramolecular Heck reaction," Tetrahedron Lett., 1995, Vol. 36(36), pgs. 6555-8.	
CA	A161	Wang, C.P. et al., "High performance liquid chromatographic isolation and spectroscopic characterization of three major metabolites from the plasma of rats receiving rapamycin (sirolimus) orally," J. Liq. Chromatogr., 1995, Vol. 18(13), pgs. 2559-68.	

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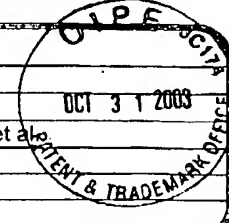
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CA	A162	Armistead, D.M. et al., "Design, synthesis and structure of non-macrocyclic inhibitors of FKBP12, the major binding protein for the immunosuppressant FK506," Acta Crystallogr. 1995, Vol. D51(4), pgs. 522-8.	
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		Filing Date	07/10/2003
Date Submitted: (use as many sheets as necessary)		First Named Inventor	Gregory S. Hamilton et al.
		Group Art Unit	1625
Sheet 9 of 12		Examiner Name	Unassigned
		Attorney Docket Number	054707-1231

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CA	A177	Rao, A.V. Rama and Desibhatla, Vidyanand, "Studies directed towards the synthesis of rapamycin: stereoselective synthesis of C-1 to C-15 segment," Tetrahedron Lett., 1993, 34(44), 7111-14.	
CA	A178	Andrus, Merrit B., "Structure-based design of an acyclic ligand that bridges FKBP12 and calcineurin," J. Am. Chem. Soc., 1993, Vol. 115(2) pgs. 10420-1.	
CA	A179	Luengo, Juan I. Et al., "Efficient removal of pipicolinate from rapamycin and FK506 by reaction with tetrabutylammonium cyanide," Tetrahedron Lett., 1993, Vol. 34(29), pgs. 4599-602.	
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CA	A187	Whitesell, J.K. et al., "Asymmetric Induction. Reduction, Nucleophilic Addition to, Ene Reactions of Chiral $\alpha$ -Ketoesters," J. Chem. Soc., Chem Commun., 1983, pg. 802.	
CA	A188	Ando, Takao et al., "Formation of Crossed Phenazine from the reaction between Tetra-p-anisyl- and Tetra-p-tolyl- hydrazines in Liquid Sulphur Dioxide," Chem. Comm., S. Chem. Comm., 1975, pg. 989.	
CA	A189	Kino, Toru et al., "FK-506, A novel immunosuppressant isolated from A <i>Streptomyces</i> ," J. of Antibiotics, 1987, Vol. 40(9), pgs. 1249-55.	
CA	A190	Goulet, Mark T. and Boger, Joshua, "Degradative studies on the tricarbonyl containing macrolide rapamycin," Tetrahedron Lett., 1991, Vol. 32(45), pg. 6454.	
CA	A191	Goulet, Mark T. et al., "Construction of the FK-506 analog from rapamycin-derived materials," Tetrahedron Lett., 1991, Vol. 32(36), pgs. 4627-30.	

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CA	A192	Rao, A.V. Rama et al., "Studies directed towards the synthesis of immunosuppressive agent FK-506: synthesis of the entire bottom half," Tetrahedron Lett., 1991, Vol. 32(9), pgs. 1251-4.	
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CA	A195	Hayward, C.M. et al., "An application of the Suarez reaction to the regiospecific synthesis of the C <sub>28</sub> -C <sub>42</sub> segment of rapamycin," 1993, pgs. 3989-92.	
CA	A196	Waldmann, Herbert, "Proline benzyl ester as chiral auxiliary in Barbier-type reactions in aqueous solution," Synlett, 1990, Vol. 10, pgs. 627-8.	
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CA	A198	Hauske, James R. et al., "Design and Synthesis of Novel FKBP Inhibitors," J. Med. Chem., 1992, Vol. 35, pgs. 4284-4296.	
CA	A199	Holt, Dennis A. et al., "Structure Activity Studies of Nonmacrocylic Rapamycin Derivatives," Bioorganic & Medical Chemistry Letters, 1993, Vol. 3, No. 10, pgs. 1977-1980.	
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CA	A205	Caffrey, Moya V. et al. "Synthesis and Evaluation of Dual Domain Macrocylic FKBP12 Ligands," Bioorganic & Medicinal Chemistry Letters, 1994, Vol. 4, No. 21, pgs. 2507-2510.	
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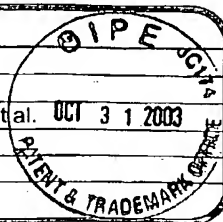
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CA	A208	Wang, Gary T. et al. "Synthesis and FKBP Binding of Small Molecule Mimics of the Tricarbonyl Region of FK506," Bioorganic & Medicinal Chemistry Letters, 1994, Vol. 4, No. 9, pgs. 1161-1166.	
CA	A209	Snyder, Solomon H. and Sabatini, David M., "Immunophilins and the Nervous System," Nature Medicine, 1995, Vol. 1, No. 1, pgs. 32-37.	
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CA	A212	Kocienski, P. et al., "A synthesis of the C(1)-C(15) segment of tsukubaenolide (FK506)," Tetrahedron Lett., 1988, Vol. 29(35), pgs. 4481-4.	
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CA	A214	Marshall, J.A. et al., "Convenient synthesis of dioxopiperazines via aminolysis of $\alpha$ -(pyruvylamino) esters," Synth. Commun., 1975, 5(3), 237-44.	
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CA	A219	Pesson, Marcel et al., "Chemistry and Pharmacology of Derivatives of Pyrrole. I. 2-pyrrolyl Ketones. Preparation and Pharmacology." <u>Chim. Ther.</u> , (1966) Vol. 3, pgs. 127-36.	
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Date Submitted:		Applicati n Number	10/615,803
(use as many sheets as necessary)		Filing Date	07/10/2003 OCT 31 2003
		First Nam d Inv ntor	Gregory S. Hamilton et al.
		Group Art Unit	1625
		Examiner Name	Unassigned
		Attorney Docket Number	054707-1231
Sheet	12 of 12		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
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CA	A223	Kotani, E. et al. "New Synthesis of the Alkaloid (+-) -cryptopleurine by Anodic Oxidation", <u>Tetrahedron</u> , (1974), Vol. 30(17), pgs. 3027-30.	
CA	A224	Barrett, Anthony, "A New Arrangement Reaction of Penicillin G Sulfoxide", <u>J. Chem. Soc., Perkin Trans.</u> , (1979), Vol. 1(1), pgs 170-75.	
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CA	A226	Demirayak, Seref et al., "Synthesis of Some 1-(2-arylvinyl)-3-arylpyrazino (1,2-a) benzimidazole Derivatives and their Antimicrobial Activities", <u>Farmaco</u> , (1996), Vol. 51(12) pgs. 825-27.	
CA	A227	SHARKEY, John et al., "Immunophilins mediate the neuroprotective effects of FK506 in focal cerebral ischemia," Chemical Abstract, 121:221398 (XP002212406)	

Examiner Signature	<i>DIS/AKH</i>	Date Considered	4-14-04
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/615,803
		Filing Date	07/10/2003
Date Submitted:		First Named Inventor	Gregory S. Hamilton et al. OCT 31 2003
		Group Art Unit	1625
(use as many sheets as necessary)		Examiner Name	Unassigned
		Attorney Docket Number	054707-1231
Sheet	1	of	12



## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code <sup>2</sup> (if known)				
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Examiner Signature	<u>AW/ AKH</u>	Date Considered	<u>4-14-04</u>
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